APPENDIX D

SMaRT Station Discharge Permit

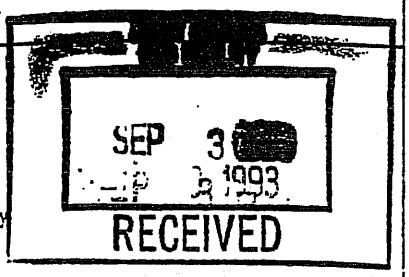
APPENDIX E

Solid Waste Facility Permit for Kirby Canyon Landfill

SOLID WASTE FACILITY PERMIT

SWIS No. 43-AN-0008

e and Street Address of Facility:	3. Name and Mailing Address of Operator:	4. Name and Mailing Address of Owner:
y Canyon Recycling and Disposal lity Scheller Avenue Jose. CA 95013	Waste Management of California. Inc. P.O. Box 1870 Morgan Hill. CA 95038	Castle & Cooke Development Corporation P.O. Box 11165 Bakersfield. CA 93389



cifications:

nitted Operations:	[ ] Composting Facility (mixed wastes)	[ ] Processing Facility
	[ ] Composting Facility (yard waste)	[ ] Transfer Station
	[x] Landfill Disposal Site	[ ] Transformation Facility
	[ ] Material Recovery Facility	[ ] Other: _____

nitted Hours of Operation:

mmercial Disposal Operations	12:00 am to 5:00 pm Monday through Saturday*
lic Disposal Operations	7:00 am to 5:00 pm seven days per week

*Operations may be conducted on the Sunday following a major holiday or special occurrence which occurs on a normal working day

nitted Tons per Operating Day:

Total: 2,600 Tons/Day

-Hazardous - General (See Section 14 of Permit)	2,600 Tons/Day
-Hazardous - Sludge	1,000 Tons/Day
-Hazardous - Separated or comingled recyclables	N/A Tons/Day
-Hazardous - Other (See Section 14 of Permit)	N/A Tons/Day
mated (See Section 14 of Permit)	N/A Tons/Day
rdous (See Section 14 of Permit)	N/A Tons/Day

nitted Traffic Volume:

Total: 575 round trips Vehicles/Day

ming waste materials	575 Vehicles/Day
going waste materials (for disposal)	N/A Vehicles/Day
going materials from material recovery operations	N/A Vehicles/Month

Design Parameters (Detailed parameters are shown on site plans bearing LEA and CIWMB validations):

	Total	Disposal	Transfer	MRF	Composting	Transformation
d Area (in acres)	327 Acres	311 Acres	N/A	N/A	N/A	N/A
Capacity		as of 7/93: 36.4M c.y. (refuse)	N/A	N/A	N/A	N/A
evation (Ft. MSL)		1200 ft.				
epth (Ft. BGS)		N/A				
d Closure Date		2022				

rmit is granted solely to the operator named above, and is not transferable. Upon a change of operator, the permit is subject to revocation or suspension. The d permit findings and conditions are integral parts of this permit and supersede the conditions of any previous issued solid waste facility permits.

roval:

oving Officer Signature

nis Ferrier. Environmental Specialist. REHS.
e/Title

7. Enforcement Agency Name and Address:

City of San Jose
Division of Neighborhood Preservation
4 North Second Street, Suite 675
San Jose, California 95113

ved by CIWMB: JUL 19 1993

9. CIWMB Concurrence Date: AUG 31 1993

rmit Review Due Date: Sept. 3, 1998

11. Permit Issued Date: SEPT. 3, 1993

SOLID WASTE FACILITY PERMIT

Facility/Permit Number:

SWIS No. 43-AN-0008

12. Legal Description of Facility (refer to attached Site Vicinity and Site Location Maps, as shown in the RDSI Figures 1-1, 1-2): Rancho del Refugio de la Laguna Seca, Townships 8 and 9 South, Range 3 East, Mount Diablo Baseline and Meridian. (SEE ATTACHMENT A " Legal Site Description").

13. Findings:

a. This permit is consistent with the County Solid Waste Management Plan or the County-wide Integrated Solid Waste Management Plan (CIWMP). Public Resources Code, Section 50001. (SEE ATTACHMENT B "Conformance Finding").

b. This permit is consistent with standards adopted by the California Integrated Waste Management Board (CIWMB). Public Resources Code, Section 44010.

c. The design and operation of the facility is in compliance with the State Minimum Standards for Solid Waste Handling and Disposal as determined by the LEA (The City Of San Jose, Division of Environmental Enforcement) during the inspection of - June 29, 1993.

d. The following local fire protection district has determined that the facility is in conformance with applicable fire standards as required in Public Resources Code, Section 44151. (SEE ATTACHMENT C "Fire District Compliance"). San Jose Fire Dept. approval date Nov 13, 1992.

e. An environmental determination was filed with the State Clearinghouse (SCH # 83052408 for final EIR & SCH # 93033053 for the Neg. Dec.) pursuant to Public Resources Code, Section 21081.6. The environmental documents where filed by the City of San Jose Planning Department and adopted on September 15, 1983 and on April 14, 1993 respectively. (SEE ATTACHMENT D "Environmental Determination".

f. A County-wide Integrated Waste Management Plan has not been approved by the CIWMB.

g. The following authorized agent has made a determination that the facility is consistent with, and designated in, the applicable general plan: The City of San Jose Department of Planning. (SEE ATTACHMENT E "General Plan Conformance Finding"). Public Resources Code, Section 50000.5(a).

h. The following local governing body has made a written finding that surrounding land use is compatible with the facility operation, as required in Public Resources Code, Section 50000.5 (b): City of San Jose Department of Planning. (SEE ATTACHMENT E, "General Plan Conformance Finding).

14. Prohibitions:

The permittee is prohibited from accepting any liquid waste sludge, non-hazardous waste requiring special handling, designated waste, or hazardous waste unless such waste is specifically listed below, and unless the acceptance and disposal of such waste is authorized by all applicable permits. All non-liquid wastes containing less than 50 percent solids must be handled and disposed as described in a waste management plan approved by the Regional Water Quality Control Board (RWQCB) and Local Enforcement Agency (LEA).

a. Non-liquid water treatment residue such as solids from screens and settling tanks, and sludge containing at least 20 percent solids.
b. Non-liquid sewage treatment residue such as solids from screens and grit chambers, and sludge containing at least 20 percent solids.
c. Wastes, other than water treatment and waste water treatment sludge, containing greater than 50 % solids, which have been approved by the LEA and the RWQCB waste discharge requirements.
d. Triple rinsed containers in accordance with Title 22, CCR, Section 66261.7.
e. Manure.
f. Dead animals or portions thereof, as approved by the LEA.
g. Ashes from household burning.

The permittee is additionally prohibited from the following items:
h. Medical wastes as defined in Chapter 6.1, Division 20 of the Health and Safety Code.

15. The following documents also describe and/or restrict the operation of this facility (insert document date in space):

	Date		Date
[x] Report of Facility Information	7/93	[x] Preliminary Closure/Post Closure Maintenance Plan	8/90
[x] Periodic Site Review	7/92	[x] Closure Financial Responsibility Document	6/93
[x] Planned Development Permits: PD 84-5-55, PDA 84-1-55	9/8/84, 1/31/92	[x] Updated Waste Discharge Requirements Order No. 93-055	6/16/93
PD 85-7-57, PDA 85-01-057	9/26/85, 4/22/93	[x] Bay Area Air Quality Management District Authority to Construct	3/14/88
PD 89-9-77	2/22/90	Permit to Operate Plant No. 1812	10/6/92
[x] FEIR and Negative Declaration	9/15/83, 4/14/93	[x] U.S. Army Corps of Engineers Section 404 Nationwide 26 Permit	11/2/92
FEIR Addendum	2/3/92		
[x] Lease Agreements - owner and operator	12/16/83		

SOLID WASTE FACILITY PERMIT

Facility/Permit Number:

SWIS No. 43-AN-0008

16. Self Monitoring:

a. Results of all self-monitoring programs will be reported as follows:
(The monitoring reports are delinquent 30 days after the end of the reporting period).

Program	Reporting Frequency	Agency Reported To
Record of receipt of a Notice of Violation from any regulatory agency. In addition, the operator shall notify the LEA at once following receipt of a Notice of Violation or upon receipt of notification of complaints regarding the facility which have been received by other agencies.	As noted	LEA
Copies of all written complaints regarding this facility and the operator's actions taken to resolve these complaints. (Notification to the LEA within one day following the complaint is still required).	As noted	LEA
The quantities and types of hazardous wastes, medical wastes, or otherwise prohibited wastes found in the waste stream and the disposition of these materials.		
All incidents of unlawful disposal of prohibited materials and the operator's actions taken. Indicate those incidents which occurred as a result of the random load checking program. Incidents, as used here, means that the hauler or producer of the prohibited waste is known.		
The types and quantities of decomposable and inert wastes, including separated or commingled recyclables, received each day. The operator shall maintain these records on the facility's premises for a minimum of one year and make them available to any Enforcement Agencies' personnel on request.		
The number of vehicles using the facility per day for public and commercial disposal.		
Reports of all special/unusual occurrences and the operator's actions taken to correct these problems.		
The results of the landfill gas migration control monitoring.	Quarterly (due 30 days after the 1st of January, April, July, and October)	LEA
The results of the leachate monitoring, collection, treatment and disposal program. The operator shall monitor leachate generation as required by the WDRs. The operator will collect, treat and effectively dispose of the leachate in a manner approved by the LEA and the CRWQCB.		
Topographical map* showing all current fill locations.	Annually (due January 1st)	LEA
Topographical map* which indicates all cuts into native material from the previous year to the present date.		

* The above two maps shall be drawn to a scale no smaller than one inch = 200 feet unless otherwise approved by the LEA.

17. LEA Conditions:

A. Requirements:

1. This facility shall comply with all the State Standards for Solid Waste Handling and Disposal.

2. This facility shall comply with all federal, state, and local requirements and enactments including all mitigation measures given in any certified environmental document filed pursuant to the Public Resources Code, Section 21021.6.

3. The operator shall comply with all notices and orders issued by any responsible agency designated by the Lead Agency to monitor the mitigation measures contained in any of the documents referenced within this permit pursuant to the Public Resources Code Section 21081.6.

4. Additional information concerning the design and operation of this facility shall be furnished on request of the Enforcement Agencies' personnel.

5. At the discretion of the LEA, the operator shall install landfill gas monitoring probes for the detection of gas migration in addition to any process required for any purpose by any other agency.

6. The operator shall maintain a copy of this permit at the facility so as to be available at all times to facility personnel and to Enforcement Agencies' personnel.

7. The operator shall install and maintain signs at the entrance indicating that "no hazardous or liquid wastes are accepted".

8. The operator shall comply with the Waste Load Checking Program as described in Section 6.6 and Appendix G of the Report of Disposal Site Information document dated July 1993.

9. The operator shall comply with all conditions and requirements contained in the WDRs (Order No. 93-055).

B. Provisions:

1. Operational controls shall be established to preclude the receipt and disposal of volatile organic chemicals or other types of prohibited wastes. The operator shall comply with the approved Waste Load Checking Program as described in the RDSI dated July, 1993. Any changes in this program must be approved by the LEA prior to implementation. The following SWFP conditions supplement those conditions:

   a. The minimum number of random waste loads to be inspected weekly at this landfill is three (3).

   b. The number of random incoming loads to be inspected each day is determined by the LEA and shall be related to the permitted daily volume of refuse received by the facility. The LEA reserves the right to increase the required number of incoming waste load inspections.

   c. Incidents of unlawful disposal of prohibited materials shall be reported to the LEA as described in the monitoring section of this permit. In addition, the following agencies shall be notified at once of any incidents of illegal hazardous materials disposal.

2. This facility must comply with all monitoring requirements established in the Regional Water Quality Control Board Order No. 93-055, "Waste Discharge Requirements". Should it be determined, in accordance with the provisions of 23 CCR, Chapter 15 of the California Code of Regulations, that the facility has caused groundwater contamination which cannot be immediately mitigated, then the operations may be required to cease until the appropriate mitigation measures are implemented. Should it be determined that the contamination cannot be mitigated then the facility may be required to permanently close.

3. This permit is subject to review by the LEA and may be suspended, revoked or modified at any time for sufficient cause.

4. The LEA reserves the right to suspend or modify waste receiving operations when deemed necessary due to an emergency, a potential health hazard or the creation of a public nuisance.

17. LEA Conditions:

B. Provisions (continued):

5. The operator shall maintain a log of special/unusual occurences. This log shall include, but are not necessarily limited to:

   Surface fires, underground fires, explosions, earthquakes, discharge of hazardous liquids or gases to the ground or the atmosphere, or significant injuries, accidents or property damage (including slope damage), and vehicle/equipment related accidents. Each of these log entries shall be accompanied by a summary of any actions taken by the operator to mitigate the occurrence. The operator shall maintain this log at the facility so as to be available at all times to site personnel and to the Enforcement Agencies' personnel. Any of these specified entries made in this log must be immediately reported to the LEA .

6. The operator shall maintain, at the facility, accurate daily records of the weight and/or volume of refuse received. These records shall be available to the LEA's personnel and to the CIWMB's personnel and shall be maintained for a period of at least one year.

C. Specifications:

1. The operator shall notify the LEA, in writing, of any proposed significant changes in the routine facility operation or changes in facility design during the planning stages. In no case shall the operator undertake any changes unless the operator first submits to the LEA a notice of said changes at least 120 days before said changes are undertaken. Any significant change as determined by the LEA would require a revision of this permit.

2. This permit is not transferable; a change in the operator would require a new permit.

3. This permit supersedes all previous SWFPs for this site.

APPENDIX F

SMaRT Station Conditional Use Permit

CITY OF SUNNYVALE

SMaRT STATION

CONDITIONS OF APPROVAL

7060 - City of Sunnyvale, Revised 2-15-02

B. CONDITIONS OF APPROVAL

In addition to complying with applicable City Codes, Ordinances and Resolutions, the following conditions of approval are imposed:

1. Approval of this Use Permit is subject to execution of contract with the City of Sunnyvale to operate the transfer station.

2. Prior to issuance of Building Permit, a Use Permit Document shall be executed.

3. A directional sign program shall be submitted to the Planning Division for review and approval. The directional signs at minimum shall include the following:

   a. Northeast corner of Caribbean and Borregas facing east on west bound Caribbean: install signs reading "Water Pollution Control Plant" and "SMaRT Station" with directional arrows.
   b. In the west bound median facing east: install signs reading "Water Pollution Control Plant" and "SMaRT Station" with directional arrows.

   c. On Borregas Avenue north of Caribbean Drive: install signs in the median reading "Water Pollution Control Plant" and "SMaRT Station", with directional arrows.

   d. At the end of Borregas Avenue North of Caribbean Drive: install signs reading "Water Pollution Control Plant" and "SMaRT Station" with directional arrows.

   e. In the east bound median and south side of Caribbean facing west: install signs reading "Water Pollution Control Plant" and "SMaRT Station" with directional arrows.

   f. East side of Borregas Avenue just north of Caribbean install a sign reading 15 MPH".

4. All processing of waste shall be conducted in enclosed areas.

5. The site plan shall be revised to include additional landscaping. The landscape plan shall be submitted to the Director of Community Development for review and approval.

6. Trucks delivering refuse shall be limited to the hours of 5:00 a.m. to 5:00 p.m.

7. The hours of operation for wood chipping equipment shall be limited to 5:00 a.m. to 8:00 p.m.

8. The hours of operation of compactors shall be limited to 5:00 a.m. to 10:00 p.m.

9. Refuse not diverted from disposal shall be removed to the Disposal Facility within 48 hours of its delivery to the Transfer Station. The refuse transfer truck loading area shall be cleaned and swept at the end of each day of operation.

10. A dust suppressant system shall be installed in all tipping floor and equipment areas.

11. Not Used

12. Reclaimed water from water pollution control plant shall be utilized for all uses except for domestic fire or misting system or any other purposes where use of reclaimed water is prohibited by local, state or federal agencies.

13. A litter control program shall be implemented. This program at minimum shall include weekly litter pick up on the following street frontages near the Station: (Borregas Avenue from Carl Road to Moffett Park Drive; Mathilda Avenue from Highway 237 to Caribbean Drive and Caribbean Drive from the north end of Mathilda Avenue to Highway 237), collecting all debris along these streets.

14. All trash carried by commercial vehicles shall be covered to prevent littering. The applicant is encouraged to provide incentives for public to cover their refuse preventing paper and other objects to become airborne. This incentive could include discount of the fee for those who cover their refuse.

15. Out-of-door loudspeakers shall be prohibited.

16. No inoperable vehicles shall be stored out-of-doors at the site for more than 24 hours.

17. Any expansion or modification of the approved use shall be approved by separate application at a public hearing by the Planning Commission.

18. Any major site or architectural plan modification shall be treated as an amendment to the original approval and shall be approved at a Planning Commission public hearing, except that minor changes of the approved plan may be approved administratively by the Director of Community Development.

19. Details of exterior building materials and color schemes shall be submitted to the Director of Community Development for approval.

20. Any proposed fencing and/or walls shall be approved as to design and location by the Director of Community Development.

21. All existing on-site, existing street frontage and proposed overhead utilities shall be undergrounded prior to occupancy.

22. Unenclosed storage area(s) shall be fully screened to the highest point of any stored or stacked materials, equipment and/or supplies of any kind. The design and method of enclosure is subject to approval by the Director of Community Development. Any modification or expansion of unenclosed uses shall require approval from the Director of Community Development.

23. Preferential parking stalls in the first row of parking adjoining the building(s) shall be reserved and so marked for pool vans capable of carrying at least 8 people.

24. All outside lighting shall be installed and arranged as not to illuminate the area to the north.

25. A solar energy collection system shall be provided as the primary means of heating water for potable use. The requirement may be waived if solar is not cost effective using present value life cycle cost analysis as established by the City.

26. The landscape and irrigation plan shall be submitted to the Director of Community Development for approval prior to issuance of Building Permit Landscaping shall be planted prior to occupancy. The landscape plan shall include the following elements:

    a. Provide trees at minimum 30 feet intervals along side and rear property lines, except where mature trees are located immediately adjoining on neighboring property.

b. Ground cover shall be planted so as to ensure full coverage eighteen months after installation.

c. All areas not required for parking, driveways or structures shall be landscaped.

27. Prior to issuance of a Demolition Permit, a Grading Permit or a Building Permit, whichever occurs first, obtain approval of a tree protection plan from the Director of Community Development. Indicate all existing non-orchard trees on the plans, showing size and varieties, and clearly specify which are to be retained.

28. Submit exterior lighting plan, including fixture and pole designs, for approval by the Director of Community Development prior to issuance of Building Permit. Driveways and parking area lighting shall include the following:

    a. Sodium vapor (or illumination with an equivalent energy savings).

    b. Pole heights not to exceed 15 feet.

    c. Provide photo cells for on/off control of all security and area lights.

    d. All exterior security lights shall be equipped with vandal-resistant covers.

    e. Implement approval plan prior to occupancy.

    f. Wall packs shall not be placed on the roof of the building.

29. Consult with the Crime Prevention Division of the Public Safety Department for crime prevention measures appropriate to the proposed development.

30. On-site storage of hazardous waste shall be limited to household hazardous waste. Any other waste stored on-site, except for waste oil from maintenance of vehicles, shall be associated with load checks and shall not be stored on-site for more than 90 days. There shall be no drop-off facilities for hazardous waste.

31. A noise review to be conducted one year from the date of the completion of the transfer station.

32. The transfer trucks should be encouraged to use the Lawrence/Caribbean Way corridor rather than Mathilda.

APPENDIX G

Legal Description of SMaRT Station Site

Legal Description of SMaRT Station Facility Site

All that certain real property situated in the City of Sunnyvale, County of Santa Clara, State of California being portions of Lots 14, 15 and 16 as shown on the Map of Crossman Subdivision No. 2 filed in Book F-2 of Maps at page 24 and a portion of Lot 79 of the Map of T.J. Murphy's Subdivision No. 3 filed in Book I of Maps at page 45, Santa Clara County Records described as follows:

Commencing at a brass disk monument at the intersection of the centerline of Borregas Avenue with the centerline of Caribbean Drive as shown upon that certain Record of Survey Map filed July 18, 1969 in Book 256 of Maps at page 28 and 29, Santa Clara County Records;

Thence from said Point of Beginning along the centerline of Caribbean Drive South 75_ 09' 07" East 364.21 feet;

Thence leaving said centerline North 14_ 50' 53" East 432.07 feet to the TRUE POINT OF BEGINNING;

Thence from said TRUE POINT OF BEGINNING North 14_ 50' 53" East 100.70 feet;
Thence South 69_ 14' 28" East 21.68 feet;

Thence easterly along a tangent curve concave to the North with a radius of 396.00 feet, through a delta angle of 4_ 11' 54" for a length of 29.02 feet;

Thence South 73_ 26' 22" East 285.41 feet;

Thence South 75_ 09' 28" East 76.35 feet;

Thence Northeasterly along tangent curve concave to the Northwest with a radius of 46.00 feet, through a delta angle of 87_ 42' 40" for a length of 70.42 feet;

Thence along a line that is radial to the end point of said curve South 72_ 51' 55" East 4.00 feet;

Thence North 20_ 38' 42" East 198.66 feet;

Thence North 21_ 28' 05" East 74.25 feet;

Thence Northeasterly along a tangent curve concave to the southeast with a radius of 38.00 feet, through a delta angle of 34_ 21' 30" for a length of 22.79 feet;

Thence North 55_ 49' 36" East 31.46 feet;

Thence North 59_ 05' 49" East 29.54 feet;

Thence North 55_ 15' 29" East 38.84 feet;

Thence North 52_ 47' 38" East 47.83 feet;

Thence North 58_ 19' 56" East 21.46 feet;
Thence Easterly along a tangent curve concave to the South with a radius of 70.00 feet, through a delta angle of 41_ 26' 14" for a length of 50.63 feet;

Thence South 80_ 13' 50" East 601.01 feet;

Thence South 17_ 41' 00" West 176.47 feet;

Thence South 17_ 58' 53" West 254.71 feet;

Thence Southwesterly along a tangent curve concave to the Northwest with a radius of 95.00 feet, through a delta angle of 43_ 29' 18" for a length of 72.11 feet, to the beginning of a non tangent curve concave to the North with a radius of 92.00 feet;

Thence Westerly from a radial bearing of North 21_ 40' 27" West along said non tangent curve through a delta angle of 37_ 35' 15" for a length of 60.35 feet;

Thence North 74_ 05' 12" West 424.34 feet;

Thence South 14_ 50' 32" West 53.97 feet;

Thence North 75_ 09' 28" West 12.62 feet;

Thence Westerly along a curve concave to the South with a radius of 156.00 feet, through a delta angle of 34_ 45' 50" for a length of 94.65 feet, to a point of reverse curvature;

Thence Westerly from said point of reverse curvature along a curve concave to the North with a radius of 281.00 feet, through a delta angle of 34_ 44' 05' for a arc length of 170.35 feet;

Thence North 75_ 09' 28" West 124.62 feet;

Thence North 73_ 26' 22' West 334.49 feet, to the TRUE POINT OF BEGINNING.

Reserving therefrom an easement for public ingress and egress and any and all public service facilities including poles, wires conduits, gas, water, pipes, storm drains, sanitary sewers, gas recovery facilities, monitoring wells and all appurtenances to the above, under, upon, or over the following described portion;

Commencing at a brass disk monument at the intersection of the centerline of Borregas Avenue with the centerline of Caribbean drive as shown upon that certain Record of Survey Map filed July 18, 1969 in Book 256 of Maps at pages 28 and 29, Santa Clara County Records;

Thence from said Point of Beginning along the centerline of Caribbean Drive South 75_ 09' 07" East 364.21 feet;

Thence leaving said centerline North 14_ 50' 53" East 432.07 feet, to the TRUE POINT OF BEGINNING;

Thence from said TRUE POINT OF BEGINNING North 14_ 50' 53"" East 100.70 feet;

Thence South 69_ 14' 28" East 21.68 feet;

Thence easterly along a tangent curve concave to the North with a radius of 396.00 feet, through a delta angle of 4_ 11' 54" for a length of 29.02 feet;

Thence South 73_ 26' 22" East 285.41 feet;

Thence South 75_ 09' 28" East 285.41 feet;

Thence Northeasterly along tangent curve concave to the Northwest with a radius of 46.00 feet, through a delta angle of 87_ 42' 40" for a length of 70.42 feet;

Thence along a line that is radial to the end point of said curve South 72_ 51' 55" East 4.00 feet;

Thence North 20_ 38' 42" East 13.29 feet;

Thence South 56_ 44' 47" East 62.31 feet;

Thence South 74_ 05' 12" East 198.10 feet;

Thence South 14_ 50' 32" West 53.97 feet;

Thence North 75_ 09' 28" West 12.62 feet;

Thence Westerly along a curve concave to the South with a radius of 156.00 feet, through a delta angle of 34_ 45' 50" for a length of 94.65 feet, to a point of reverse curvature;

Thence Westerly from said point of reverse curvature along a curve concave to the North with a radius of 281.00 feet, through a delta angle of 34_ 44' 05" for an arc length of 170.35 feet;

Thence North 75_ 09' 28" West 124.62 feet;

Thence North 73_ 26' 22" West 334.45 feet, to the TRUE POINT OF BEGINNING.

Appendix H

Description of SMaRT Station Processing Equipment

Table H-1 Stationary Equipment to be furnished by City

Table H-2 SMaRT Station Processing Equipment to be Furnished and Owned by Contractor

Exhibit H-1
Equipment to be Furnished By City

Materials Recovery Equipment:

C-99	Infeed Walking Floor
C-100	Infeed Conveyor
E-100	Bag Slitter (Bag Opening System)™
C-101	Residential Middles Charging Conveyor
E-101	Size Separator
C-200	Vibratory Picking Conveyor
E-200	Sorting Room (Picking Enclosure)
C-250	Overs Transfer Conveyors
C-251	Overs Transfer Conveyors
E-300	Rotary Materials Separator (RMS)™
C-310	RMS™ Fines Conveyor
C-311	Fines Transfer Conveyor
C-320	Ferrous Discharge Conveyor
E-320	Ferrous Air Knife
C-321	Ferrous Transfer Conveyor
C-322	Ferrous Cleanup Conveyor
C-323	Ferrous Discharge/Transfer Conveyor
E-325	Overhead Belt Magnet (Ferrous Cleanup Magnet)
C-450	ARM™ Feed Conveyor
C-455	ELPAC™ Vibratory Feeder
E-500	Aluminum Recovery Module (ELPAC)™ PULSORT ™
E-502	Live Edge Roller
E-505	ELPAC™ Air Knife Blower
E-550	Can Crusher
C-570	PULSORT™ Vibratory Feeder
C-593	Pulsort™ Residue Conveyor
C-595	Aluminum Discharge Conveyor
C-600	ARM™ Residue Discharge Conveyor
E-600	(Sorting Room) Picking Enclosure
C-601	Residue Transfer Conveyor
C-602	Residue Transfer Conveyor
C-602	Residue Conveyor Extension
C-610	BOS™ Classifier Fines Conveyor
C-611	Fines Transfer Conveyor
C-612	Fines Transfer Conveyor
C-650	Discharge Conveyor
C-651	Transfer Conveyor
C-655	Transfer Conveyor
E-655	Autosort™ "B"

Exhibit H-1
Equipment to be Furnished By City (Continued)

C660	Feed Conveyor
C-665	Autosort™ "A"
E-665	Transfer Conveyor
C-670	Autosort™ "C"
C-700	Transfer Conveyor
C-701	Infeed Walking Floor
E-701	Infeed Conveyor
C-702	Size Separator
E-702	Vibratory Picking Conveyor
C-703	Sorting Room (Picking Enclosure)
E-703	Overs Transfer Conveyor
C-710	Overhead Belt Magnet
C-711	Middles Conveyor
C-715	Overs Picking Conveyor
E-715	Unders Transfer Conveyor
C-900	Overhead Belt Magnet
E-900	Bunker Walking Floor Conveyor
C-901	Fiber Baler
C-902	Bunker Walking Floor Conveyor
C-903	Bunker Walking Floor Conveyor
C-904	Bunker Walking Floor Conveyor
C-905	Bunker Walking Floor Conveyor
E-920	Fiber Baler Feed Conveyor
E-930	PLC™
E-940	Miscellaneous Electronic Controls
E-950	Air Compressors/Dryers
	Enclosures HVAC
E-980	Misc. Stairs/Platforms Ferrous
	Motor Control Center (MCC)

Transfer Equipment:

Refuse Compactor
Compactor Infeed Conveyor
Top Load Conveyor
(3) Truck Scales (2 inbound, 1 outbound)

Exhibit H-1
Equipment to be Furnished By City (Continued)

Wood and Yard Waste Processing Equipment:

Feed Conveyor
Troughing Conveyor
Metal Detector
Shredder
Dust Collection Bag House
Conveyor w/ Magnetic Head Pulley
Disc Scalping Screen
Overs Conveyor
Fines Conveyor

Source Separated Recyclables Processing Equipment:

Fiber Infeed
Fiber Platform and Sorting Conveyor
Fiber Bunkers
Container Infeed
Trom-mag™
Cyclone
Heavies Platform and Sorting Conveyor
Lights Platform and Sorting Conveyor
Lights Bunkers
Scale
Baler Infeed
Mosley Gorilla Baler
Motor Control Center (Curbside)

Table H-2

SMaRT Station Processing Equipment
Equipment to be Furnished and Owned by Contractor

EQUIPMENT		QTY
CAB-OVER TRACTORS	PETERBILT	10
48' ALUMINUM TRAILERS	PEERLESS	10
ROLL-OFF TRUCKS	PETERBILT	1
FRONT END LOADER	CAT 950	1
FRONT END LOADER	CAT 950	1
FRONT END LOADER	CAT IT28	1
FRONT END LOADER	CAT 906	1
40 CY ROLL-OFF	CONSOLIDATED FABRICATORS	10
6 CY BINS	CONSOLIDATED FABRICATORS	10
4 CY BINS	CONSOLIDATED FABRICATORS	30
HHW STORAGE BOX	STAGG	2
FORKLIFT	CLARK	4
ROLL-OFF TRUCK	PETERBILT	1
BOOM LIFT	CATERPILLAR	1
STREET SWEEPER	TENCO	1

APPENDIX I

Traffic Calculations - Queuing Requirements

[The following traffic calculations are excerpted from the original SMaRT Station Design documents, and have not been updated to reflect any changes in traffic loading experienced at the SMaRT Station. It has not been necessary to re-evaluate traffic design at SMaRT because queues and wait times have been extremely efficient, with only rare exceptions.]

Design Criteria

The original queuing allowances and waiting times established by the City of Sunnyvale in the Performance Standards and contained in the City's contract with the station operator are:

- Waiting time from arrival at gate house to the time refuse vehicles can exit station shall be no longer than 15 minutes.

- Waiting time for the public shall be no longer than 4 minutes at the tollbooth and 4 minutes to be assigned to a place to dump.

For design purposes, the volume and the types of traffic and peak arrival rates were established as follows:

Design Weekday Traffic Volumes and Peak Hourly Arrival Rates

	Daily Totals	Peak Hourly Rates
Residential Packer	61	7
Commercial Packer	64	12
Roll-off or Drop Boxes	115	21
Public (including buy-back)	316	29
Curbside Collection	30	4
Transfer Trucks	55	4
Trucks Hauling Recovered Material	33	1*
Employees	86	2**
TOTAL	760	

Design Weekend Traffic Volumes and Peak Hourly Arrival Rates

	Daily Totals	Peak Hourly Rates
Residential Pacer	0	0
Commercial Packer	9	2
Roll-off	0	0
Public	458	58
Curbside Collection	0	0
Transfer Trucks	10	1
Trucks Hauling Recovered Materials	2	1*
Employees	40	2**
TOTAL	519	

The above rates are based on the final station capacity of 1,500 TPD.

Design Extra Dump Weekend Traffic Volumes and Peak Hourly Arrival Rates

	Daily Totals	Peak Hourly Rates
Residential Pacer	0	0
Commercial Packer	9	2
Roll-off	5	1
Public	1200	150
Curbside Collection	0	0
Transfer Trucks	55	1
Trucks Hauling Recovered Materials	10	1*
Employees	111	9**
TOTAL	1390	

* Arrival and departure of trucks hauling recovered materials to market is scheduled so as not to occur during the peak arrival times for waste hauling trucks.

** Employee arrival and departure times are prior to and after event hours, not at peak waste arrival times. Routing of employee vehicles through the site does not impact the waiting times or queuing requirements of the Performance Standards.

a. Station Capacity

For on-site traffic management and queuing requirements, the transfer trailers, recovery trucks and employee vehicles are not considered because they have a separate, exclusive in-bound lane and proceed directly to specified areas. They do not presently stop at the scale house. Therefore, these vehicles were not included in the on-site queuing requirements. In the future, vehicles may be required to stop for 30 seconds to enable a scan for radioactive waste. An analysis of the impact of this practice to traffic patterns will be performed prior to modifying scale house stopping requirements.

For station capacity, only the time that a vehicle occupies a specific area, thus preventing the next vehicle from occupying that same area is considered. Therefore, only the time at the scale house and at the unloading stalls is considered for station capacity. Based on this, the station capacity is as follows:

> The peak arrival rates are 40 vehicles per hour (residential/commercial weekday), 29 vehicles per hour (public weekday), and 58 vehicles per hour (public weekend). However, it is reasonable to assume that, at a minimum, 10% of the public or self-haul vehicles contain wood wastes and yard debris, which are unloaded in a separate area. Therefore, the actual number of vehicles at the main unloading areas during the peak periods is estimated to be 40 vehicles per hour (residential/commercial weekdays), 26 vehicles per hour (public weekdays), and 52 vehicles per hour (public weekend).

During extra dump events two additional commercial stalls are utilized, and four additional stalls are provided for unloading of yard and wood waste materials, bringing the total available stalls to 32. Additional traffic spotters are utilized to direct vehicles, and personnel are provided to assist customers to unload their vehicles to reduce service time. The actual number of vehicles at the unloading areas during the peak periods is estimated to be 150 vehicles per hour. Additional queuing area is provided on the facility site during extra dump weekend events, although queuing of vehicles has occurred off the facility site and on to Caribbean Drive on occasion.

Packer & Roll-Off Trucks

Service Time:

Time at scale house	1.0 min.
Time to maneuver, unload & exit building	8.0 min.
Miscellaneous delays	1.0 min.
TOTAL:	10.0 min.

Capacity

A total of 18 stalls are available for commercial truck unloading, 6 for non-processible wastes, and 12 for processible wastes.

- For 6 stalls (non-processible residential), the capacity for weekdays at peak hours

$= \frac{6 \times 60}{10} = 36$ vehicles per hour which is greater than peak arrival of 7 vehicles per hour.

- For 12 stalls (processible commercial and drop box), the capacity for weekdays at peak hours

$= \frac{12 \times 60}{10} = 72$ vehicles per hour — which is greater than the peak arrival of 33 vehicles per hour.

- For weekends, only 1 stall is required for packer and roll-off trucks --the capacity for one stall at peak hours

$= \frac{1 \times 60}{10} = 6$ vehicles per hour — which is greater than the peak arrival rate of 2 vehicles per hour.

Public Vehicles

Service Time:

Time at scale house	1.0 min.
Time to maneuver, unload & exit the building	15.0 min.
Miscellaneous delays	1.0 min.
TOTAL:	17.0 min.

Public Vehicles - Extra Dump Events

Service Time:

Time at scale house	1.0 min
Time to maneuver, unload & exit the building	10.0 min.
Miscellaneous delays	1.0 min
TOTAL:	12.0 min.

Capacity

•For 11 stalls, the capacity for weekdays at peak hour

$= \frac{11 \times 60}{17} = 39$ vehicles per hour) — which is greater than peak arrival of 26 vehicles per hour.

•for **weekends**, the capacity for the peak hour

$= \frac{(11 + 15)^* \times 60}{17} = 92$ vehicles per hour — which is greater than peak arrival of 52 vehicles per hour.

*for **extra dump weekends**, the capacity for the peak hour

$= \frac{(28 + 4)^* \times 60}{12} = 160$ vehicles per hour — which is greater than peak arrival of 150 vehicles per hour.

- The number of 26 stalls is determined by using all of the public stalls (11) plus 15 of the commercial stalls on weekends. The number of 32 stalls is determined by using all of the public stalls (11) plus 17 of the commercial stalls on weekends. An additional 4 stalls are added in the area of the topload conveyor during extra dump

events. Service time during extra dump events is reduced through personnel assigned to assist customers in unloading their vehicles.

Summary of Station Capacity

Vehicle	Peak Hourly Arrival Rate	# Stalls Provided	Station Capacity
Packer/Roll-off (weekday)	40	18	108
Packer/Roll-off (weekend)	2	1	6
Public (weekday)	26*	11	39
Public (weekend)	52*	26	92
Public Extra Dump Events	150	32	160

*These arrival rates have been reduced by 10% for separate unloading of wood and yard debris.

Queuing Requirements

The previous station capacity analysis has shown that the station has sufficient capacity to handle the peak arrival rates. However, queuing may occur due to the random arrival of vehicles within the peak period. By utilizing the queuing theory for multiple channels as presented in the 1976 edition of the Transportation and Traffic Engineering Handbook, a 95% probability of the maximum queuing length can be calculated. The results of this queuing calculation are as follows:

Vehicle	Peak Arrival	Station Capacity	# Stalls Provided	95% Queue	Queue Length Required	Queue Length Provided
Packer/Roll-off (weekday)	40/hr.	108	18	0	0	600 ft.
Public (weekday)	26/hr.	39	11	4	80 ft.	400 ft.
Public (weekend)	52/hr.	92	26	0	0	1200 ft.
Public (weekend) Extra Dump	150	160	32	6	120	1200

The 95% queue represents the 95% probability that the number of vehicles shown in queue will not be exceeded. That is, the possibility of 4 vehicles or 80 ft. being exceeded is likely to occur only 5% of the time. The queuing length total is the length of queue provided prior to the scale house or tollbooth.

Performance Standards

As shown, the station has sufficient capacity so that 95% of the time, no commercial vehicles during the weekdays nor public vehicles on weekends require queuing prior to the scale house. The 5% of the time that a queue forms can easily be accommodated in the queuing length provided. During weekdays, there is a 95% probability that up to 4 public vehicles could be in a queue prior to the tollbooth. This maximum value of 4 vehicles can

result in a wait time of up to 4 minutes, which is within the Performance Standards established by the City. These standards are described later in this Section.

With respect to the in-bound refuse vehicles, the following times are to be expected:

Queue to scale house	0.0 min.
Time at scale house	1.0 min.
Drive from scale house to process building	2.0 min.
Time to maneuver, unload & exit process building	8.0 min.
Drive from process building to scale	2.0 min.
Time at scale	1.0 min.
Miscellaneous delays	1.0 min.
TOTAL:	15.0 min.

This total is consistent with the Performance Standard required by the City in its contract with the station operator of no longer than 15 minutes from the arrival at the scale house to the exit from the station.

b. Traffic Loading

The traffic analysis presented demonstrates the following:

- The station capacity is sufficient to handle the peak arrival conditions of both commercial and public vehicles during normal operations and extra dump events.
- By applying the theory of queuing due to the random arrival of vehicles in a peak period, the queuing area is still sufficient, even under peak conditions, to prevent the possibility of queuing occurring off the station site during normal operations.
- In-bound refuse vehicles take no longer than 15 minutes from the time they arrive at the scale house until the time they can exit the site.
- Since there are only a maximum of 4 public vehicles in a queue during the peak periods, plus the fact that the scale-house can be utilized during these peak periods, the Performance Standard requiring 4 minute wait for the public vehicles will not be exceeded during normal operations.

APPENDIX K

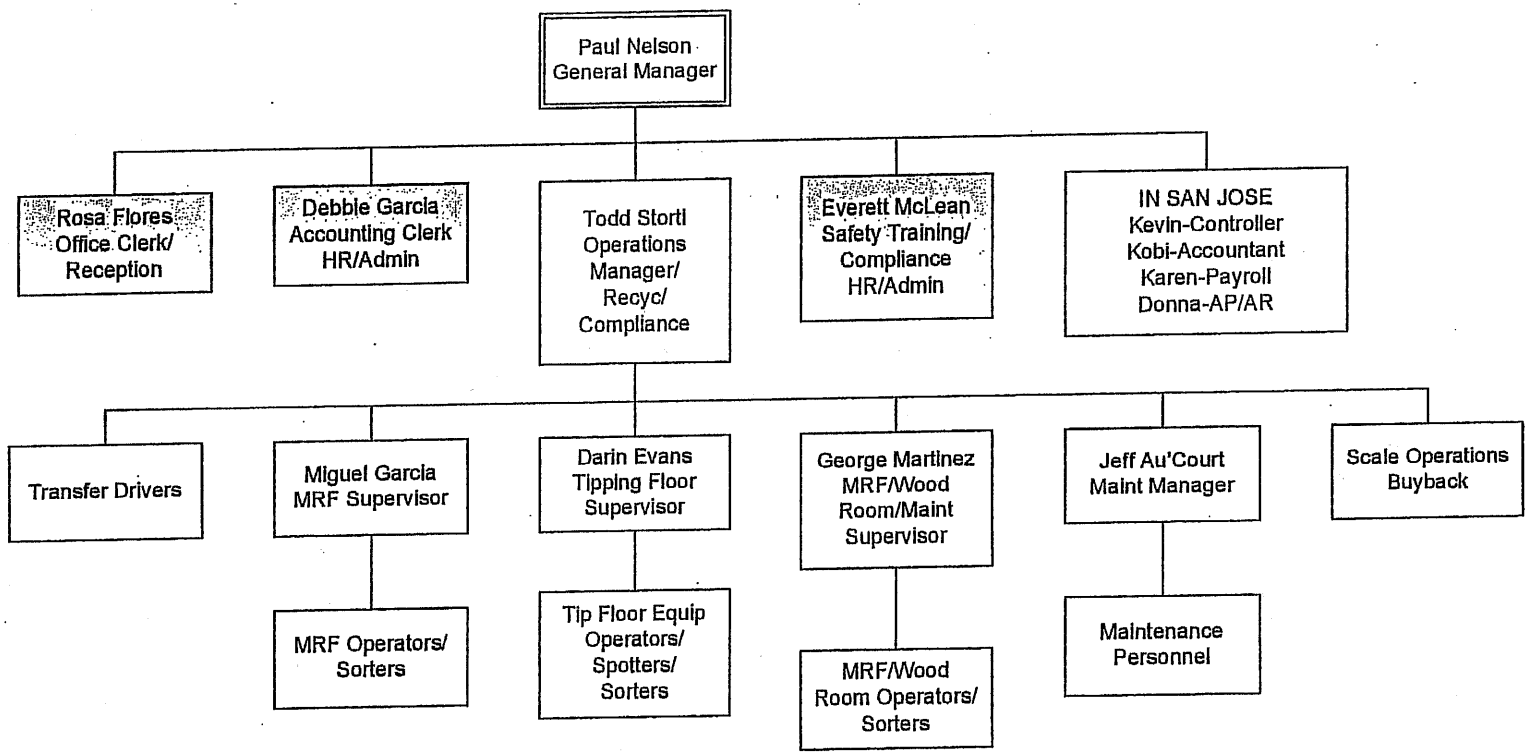
Contract Operator's Organizational Plan

GreenTeam/Zanker of Sunnyvale

GreenTeam/Zanker

SMaRT Station

September 2002



APPENDIX L

Contract Operator's Health and Safety Plan

GreenTeam/Zanker of Sunnyvale